

Patent claims:

1. A plug connector (1), for electrically connecting
5 electronic components, comprising one or more contact
elements (6) as well as a housing (2), which consists
of a lower part (3) and of an upper part (4) that can
be joined to said lower part (3), the contact elements
10 (6) being contained between the lower part (3) and the
upper part (4), the lower ends of the contact elements
(6) projecting through openings (0) located in the
housing (2), and the upper ends of the contact
elements (6) being able to be contacted via openings
15 (0) located in the upper part (4) of the housing (2),
characterized in that the respective contact element
(6) is formed from at least three limbs (61, 62, 63),
which extend in a stepped manner inside the housing
(2), one of the limbs (62) being flexibly arranged
20 inside a cavity (11) formed between the upper part (4)
and lower part (3).
2. A plug connector according to claim 1, characterized
in that a middle limb (62) arranged between two outer
limbs (61, 63) of the respective contact element (6)
25 is flexibly arranged in the cavity (11).
3. A plug connector according to claim 2, characterized
in that the two outer limbs (61, 63) extend
30 approximately in the same direction, while the middle
limb (62) in the region of the cavity (11) encloses
with the respective outer limb (61, 63) an
approximately equal-sized aperture angle α , which
allows for a bending deformation of the middle limb
35 (62) of the contact element (6).

4. A plug connector according to one of the preceding
claims, characterized in that the respective contact
element (6) is formed in one piece.
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5. A plug connector according to one of the preceding
claims, characterized in that several contact elements
(6) are uniformly embodied and are arranged in the
housing (2) at a constant distance from each other
substantially in identical position.
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6. A plug connector according to one of the preceding
claims, characterized in that the housing (2)
comprises at least two bores (8) and at least two
fixing elements (9) for fastening.
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7. A plug connector according to claim 6, characterized
in that the fixing elements (9) are embodied as
plastic tongues with a shoulder (A).
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8. A plug connector according to claim 6 or 7,
characterized in that the fixing elements (9) taper
towards their end.
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A Plug Connector for Electrically Connecting Electronic Components

5 For a plug connection, which is reliable and protected with regard to mechanical and thermal loads, with a plug connector (1), comprising one or more contact elements (6) as well as a housing (2), which consists of a lower part (3) and of an upper part (4) that can be joined to said
10 lower part (3), the contact elements (6) being contained between the lower part (3) and the upper part (4), the lower ends of the contact elements (6) projecting through openings (0) located in the housing (2), and the upper ends
15 of the contact elements (6) being able to be contacted via openings (0) located in the upper part (4) of the housing (2), it is provided that each contact element (6) is formed from at least three limbs (61, 62, 63) which extend in a stepped manner inside the housing (2), one of the limbs
20 (62) being flexibly arranged inside a cavity (11) formed between the upper part (4) and lower part (3).

FIG. 3

List of reference numerals

- 1 Plug connector
- 5 2 Housing
- 3 Lower part of the housing
- 4 Upper part of the housing
- 5 Contact element, comprising a
 - 10 61 outer limb, in particular a limb forming one end of the contact element
 - 62 middle limb of the contact element
 - 62 outer limb, in particular a limb forming the other end of the contact element
- 15 7 Mounting link
- 8 Bore
- 9 Fixing element
- 10 Contact bag
- 11 Cavity
- 20 12 Distance retainer
- A Shoulder
- H Joining aid
- K Partial conical surface
- 25 O Opening in the housing, in particular in the upper part and lower part
- α Aperture angle